

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-35 (Cancelled)

36. (Original) A composition of matter comprising an aggregate of uncoated single-wall carbon nanotubes wrapped with one or more polymers.

37. (Original) A composition of matter in accordance with claim 36, wherein the aggregate of uncoated single-wall carbon nanotubes comprises a rope of single-wall carbon nanotubes in which the nanotubes are substantially aligned along their longitudinal axes.

38. (Original) A composition of matter in accordance with claim 36, wherein the aggregate of uncoated single-wall carbon nanotubes comprises a bundle of single-wall carbon nanotubes in which the nanotubes are substantially aligned along their longitudinal axes.

39. (Original) A composition of matter in accordance with claim 36, wherein the polymer is an amphiphilic polymer.

40. (Original) A composition of matter in accordance with claim 36, wherein the polymer is water soluble

41. (Original) A composition of matter in accordance with claim 36, wherein said polymer is attached to the aggregate of the single-wall carbon nanotubes by non-covalent forces.

42. (Original) A composition of matter in accordance with claim 36, wherein the aggregate of single-wall carbon nanotubes is coated with at least two different polymers.

43. (Original) A composition of matter in accordance with claim 36, wherein the aggregate of single-wall carbon nanotubes is coated with a co-polymer.

44. (Original) A composition of matter in accordance with claim 36, wherein the polymer is selected from the group consisting of: polyvinyl pyrrolidone (PVP), polystyrene sulfonate (PSS),

poly(1-vinyl pyrrolidone-co-vinyl acetate) (PVP/VA), poly(1-vinyl pyrrolidone-coacrylic acid), poly(1-vinyl pyrrolidone-co-dimethylaminoethyl methacrylate), polyvinyl sulfate, poly(sodium styrene sulfonic acid-co-maleic acid), dextran, dextran sulfate, bovine serum albumin (BSA), poly(methyl methacrylate-co-ethyl acrylate), polyvinyl alcohol, polyethylene glycol, and polyallyl amine.

45. (Original) A composition of matter in accordance with claim 36, wherein the polymer-coated aggregate of single-wall carbon nanotubes is prepared by a process comprising dispersing the uncoated aggregates of single-wall carbon nanotubes and a polymer in a solvent by a method selected from the group consisting of mixing, sonication, heating and combinations thereof.

46. (Original) A composition of matter in accordance with claim 45, wherein the coated carbon nanotube aggregates are prepared by a process further comprising adding salt in a quantity effective to promote wrapping of polymer on the aggregate of single-wall carbon nanotubes, whereby polymer becomes wrapped on the exterior of the aggregate of single-wall carbon nanotubes.

47. (Original) A composition of matter in accordance with claim 45, wherein the aggregate of single-wall carbon nanotubes are substantially free of amorphous carbon.

48. (Original) A composition of matter in accordance with claim 45, wherein the polymer is suspended in the solvent.

49. (Original) A composition of matter in accordance with claim 45, wherein the polymer and the uncoated aggregate of single-wall carbon nanotubes are added to the solvent sequentially.

50. (Original) A composition of matter in accordance with claim 45, wherein the polymer and the uncoated single-wall carbon nanotubes are added to the solvent simultaneously.

51. (Original) A composition of matter in accordance with claim 45, wherein the solvent is aqueous and the polymer is water-soluble.

52. (Original) A composition of matter in accordance with claim 51, wherein the solvent further comprises a surfactant that promotes wrapping of polymer on the aggregate of

single-wall carbon nanotubes.

53. (Original) A composition of matter in accordance with claim 45, wherein the concentration of the aggregate of uncoated single-wall carbon nanotubes in the solvent is between about 0.1 grams/liter and about 5 grams/liter.

54. (Original) A composition of matter in accordance with claim 45, wherein the concentration of polymer in the solvent is between about 1.0 percent and about 5.0 percent by weight.

55. (Original) A composition of matter in accordance with claim 45, wherein the solvent is heated to a temperature at least about 40 °C.

56. (Original) A composition of matter in accordance with claim 45, wherein the solvent is heated to a temperature of between about 50 °C and about 60 °C.

57. (Original) A composition of matter in accordance with claim 45, wherein the solvent is heated between about 0.1 hours and about 100 hours.

58. (Original) A composition of matter in accordance with claim 45, wherein the solvent is heated between about 1 hour and about 50 hours.

59. (Original) A composition of matter in accordance with claim 45, wherein the coated aggregate of single-wall carbon nanotubes comprises carbon nanotubes which are substantially aligned along their longitudinal axes.

60. (Cancelled)

61. (Currently Amended) A composition of matter in accordance with claim 45, wherein a first polymer that coats a first portion of the aggregate of the uncoated single-wall carbon nanotubes is cross-linked with a second polymer that coats a second portion of the aggregate of the uncoated single-wall carbon nanotubes.

62. (Original) A composition of matter in accordance with claim 45, wherein a first portion of a first polymer that coats the aggregate of the uncoated single-wall carbon nanotubes is cross-linked with a second portion of the first polymer.

63. (Original) A composition of matter in accordance with claim 45, wherein the polymer-coated single-wall carbon nanotube aggregate is suspended in a polymer matrix.

64. (Original) A composition of matter in accordance with claim 63, wherein the polymer matrix comprises a material selected from the group consisting of poly(methyl methacrylate), polystyrene, polypropylene, nylon, polycarbonate, polyolefin, polyethylene, polyester, polyimide, polyamide, epoxy, phenolic resin and combinations thereof.

65. (Original) A composition of matter comprising a plurality of aggregates of single-wall carbon nanotubes wherein at least some aggregate of the plurality of aggregates is coated at least in part with at least one polymer molecule.